

Abstract of the Disclosure

The invention relates to compounds of formula (I) or (II), which are of interest especially for inhibition of polymerization of amyloid β peptide, as model substances for synthesis of amyloid β peptide-ligands, as tools for the identification of other organic compounds with similar functional properties and/or as ligands for detection of amyloid deposits using e.g., positron emission tomography (PET). Formula (II) is: R₁ - A' - Y' - Leu - X' - Z' - B' - R₂ in which X' means any group or amino acid imparting to the compound according to formula (I) the ability to bind to the KLVFF-sequence in amyloid β peptide, or two amino acids imparting the same ability, but with the proviso that one is not proline; Y' means any amino acid; Z' means any non-acidic amino acid; A' means a direct bond or an α -amino acid bonded at the carboxyl terminal of the α -carboxy group or a di-, tri-, tetra- or pentapeptide bonded at the carboxyl terminal of the α -carboxy group; B' means a direct bond or an α -amino acid bonded at the α -nitrogen or a di-, tri-, tetra- or pentapeptide bonded at the α -nitrogen of the N-terminal α -amino acid; R₁ is H or -CO-R₃ bonded at the α -amino group of A'; R₂ is H, -OR₄ or NR₅R₆, all bonded to the α -carboxyl group of the α -carboxyterminal of B'; R₃ and R₄ are straight or branched carbon chain of 1-4 carbon atoms; R₅ and R₆ are independently H, alkyl, cycloalkyl, aryl or substituted aryl or together are -(CH₂)_n- where n is 4-5; and R₁ and R₂ together can form a hydrocarbon ring or heterocyclic ring; all α -amino acids being either D- or L-isomers.